

found to amount to 66 per cent. There is every prospect that within some six or seven years hence Java will largely export this drug; and the cultivation of the cinchona trees is also to be extended to Sumatra, Celebes, and the Moluccas.—*Rev. Hebdom.—Chem. News.*

Value of the Alkaloids of Cinchona.

By order of the Government, the several alkaloids of Peruvian bark have been put to the test in India, in 2,472 cases of fever. The result, as reported in the *Medical Times*, is, that the sulphate of quinidia possesses an anti-febrile power equal to the sulphate of quinia; that the sulphate of cinchonidia is slightly less efficacious, and that the sulphate of cinchonin, though very inferior to the others, is a very useful agent in the treatment of fevers.—*Pacific Med. and Surg. Journal.*

A New Test for Albumen.

A writer in the *British Medical Journal* states that Dr. C. M. Tidy has found that equal volumes of acetic and carbolic acids is a far more delicate test for the presence of Albumen than any other agent that has been proposed. In using this with urine, it is necessary to shake the test tube, as some opacity is produced by the mere admixture of fluid, which, however, disappears on agitation.—*Mich. University Journal.*

A new Use for Potatoes.

A foreign exchange describes a new mode of preparing wood pulp for paper making, which consists in using potatoes in lieu of alkaline solutions usually employed to effect from poplar and other white wood fibers the removal of gummy matter. The fibres are to be boiled in water in which there is placed among them, in the boiler, on being filled, 2 cwt. of starchy potatoes to each ton of raw fibers, such potatoes having been previously steamed in a separate vessel filled for the purpose, and passed through a strainer, sieve or colander, to remove the peel, which is injurious in some cases, but the potatoes can also be used raw with the fibres, after being well washed. The gummy matters are thoroughly extracted from the fibres, and by boiling for two, four, or six hours, according to circumstances, the process will be found quite sufficient to prepare this class of fibre for bleaching to a pulp in every way fit for the manufacture a good white quality of printing, or similar descriptions of paper.—*Jour. of Appl. Chem.*

Aniline Photographs.

The process consists of preparing paper with the bichromate of potash, to which some phosphoric acid has been added; when dry, the paper is exposed under a positive for a sufficient time, and when removed from the printing frame the picture is held over a dish containing a solution of aniline in benzole. The benzole in volatilizing, carries with it the vapor of aniline, and when the latter comes in contact with the unaltered bichromate on which light has not acted, a rich black body is produced, which is believed to be a very stable compound. Washing in water and dilute sulphuric acid, now clears the lights of the prints, and leaves a paper positive, which is the equivalent of a carbon print.—*Scientific American.*

Adulterations of Port Wine.

Professor Silliman, of Yale College, recently had occasion to examine some port wine, and testified in reference to it in a court of justice as follows: "It is an imitation of port wine, very turbid, and heavily laden with sugar or molasses and with coloring matter. It also contains oxide of lead, sulphuric acid, over 21 per cent. of alcohol, and over 19 per cent. of sugar or molasses. The specific gravity is 1,015, water being 1,000. Analytically, I determined the quantity of the ingredients. It contains sulphuric acid, 10 grains to the gallon, partly free as oil of vitriol and partly combined in alum; oxide of lead or litharge in poisonous quantities, and turbidity, or in clear liquor by filtering, about 45 grs. to the gallon. The alcohol obtained from this liquor by distillation had an acid taste. It had also an offensive odor from coloring matter. The liquor contained deleterious and poisonous substances. I have a small vial of oxide of lead. * * * The quantity found by me is ample to affect any liquor. This liquor is stronger in its contents of lead than most waters that are poisoned by it. It is in sufficient quantities to be deleterious to the human system.—*Jour. of App. Chem.*

Tinning Iron without Fuel.

A cold process of tinning has been invented by Mr. Dauble, of Bellefontaine, France. The iron is treated by successive immersion in baths containing cold solutions of salts of tin, with the addition of a certain amount of organic matter, such as fecula or starch, which has always been found valuable, both in tinning and galvanization.

The solution patented is thus made: To each 20 gallons of water add 6 lbs. of rye flour, and let it boil for about half an hour; filter it, and afterwards add 212 lbs. of pyrophosphate of soda, 34 lbs. of crystallized salt of tin, 134 lbs. of neutral protochloride of tin, and from 3 ozs. to 4 ozs. of sulphuric acid. When the salts are dissolved the solution is distributed in eight or ten wooden vats, a little additional water being added to the first two or three of the vats. The wire is passed successively through the whole of the vats, and if great brilliancy of surface is required, also through draw plates at intervals, and the wire, while retaining all its rigidity, becomes covered with a brilliantly polished coat of tin.—*Scientific American.*

Trade Report.

Our favorable report, in last number, as to the state of trade, will equally well apply to the past month, orders having come in freely from all quarters.

There is a decided tendency to advance, in nearly all classes of goods; especially those of German manufacture, which, consequent on the total stoppage of importation, are from twenty to fifty per cent. dearer.

Quotations for the latter class are not to be relied upon, as they are changing daily.

We note, in favor of retail buyers, Acid Benzoic, Bismuth and Leptandrin, which are all materially lower.

Against the buyer are Tartaric Acid, which is rising steadily, Vanilla almost out of market, Ext. Hyoscyamus, owing to a failure of crop of the herb, Glycerine, from stoppage of German supply. Oil Wintergreen is worth rather more than our quotation.

In dyestuffs, Magenta will be noticed much dearer, with a probability of a further rise, Indigo is a little lower, and there is a good deal of a made-up article in the market, purporting to be Madras, against which we would advise our readers to be on their guard.

In Spices, Black Pepper still maintains a very high figure.

In Paints, White Lead has commenced to advance, and there will likely be an advance made by the manufacturers, on that ground in Oil.

Naval stores are quiet, with the exception of Turpentine, which is very firm at advanced prices.

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